

**RAILROAD COMMISSION OF TEXAS****Form W-2**

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

Status: Approved
Date: 04/11/2018
Tracking No.: 188631

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT, AND LOG**OPERATOR INFORMATION**

Operator Name: XTO ENERGY INC. Operator No.: 945936
Operator Address: ATTN: DEEANN KEMP 6401 HOLIDAY HILL RD #5 MIDLAND, TX 79707-2156

WELL INFORMATION

API No.: 42-495-33710 County: WINKLER
Well No.: 1307H RRC District No.: 08
Lease Name: UNIVERSITY BLK 20 Field Name: TWO GEORGES (BONE SPRING)
RRC Lease No.: 42354 Field No.: 92100050
Location: Section: 13, Block: 20, Survey: UL, Abstract: U14

Latitude: Longitude:
This well is located 7.6 miles in a W
direction from WINK,
which is the nearest town in the county.

FILING INFORMATION

Purpose of filing: Initial Potential
Type of completion: New Well
Well Type: Producing Completion or Recompletion Date: 02/10/2018

Type of Permit	Date	Permit No.
Permit to Drill, Plug Back, or Deepen	02/23/2016	813658
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

COMPLETION INFORMATION

Spud date: 05/19/2017	Date of first production after rig released: 02/10/2018
Date plug back, deepening, recompletion, or drilling operation commenced: 05/19/2017	Date plug back, deepening, recompletion, or drilling operation ended: 02/10/2018
Number of producing wells on this lease in this field (reservoir) including this well: 6	Distance to nearest well in lease & reservoir (ft.): 124.0
Total number of acres in lease: 1381.51	Elevation (ft.): 2813 GR
Total depth TVD (ft.): 12026	Total depth MD (ft.): 20273
Plug back depth TVD (ft.):	Plug back depth MD (ft.):
Was directional survey made other than inclination (Form W-12)? Yes	Rotation time within surface casing (hours): 516.6
Recompletion or reclass? No	Is Cementing Affidavit (Form W-15) attached? Yes
Type(s) of electric or other log(s) run: Other	Multiple completion? No
Electric Log Other Description: RADIAL CMT BOND VARIABLE DENSITY LOG W/ GR/ CCL	
Location of well, relative to nearest lease boundaries of lease on which this well is located: 200.0 Feet from the South Line and 1526.0 Feet from the West Line of the UNIVERSITY BLK 20 Lease.	Off Lease : No

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.

Field & Reservoir	Gas ID or Oil Lease No.	Well No.	Prior Service Type
PACKET: N/A			

W2:	N/A
FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:	
GAU Groundwater Protection Determination	Depth (ft.): 950.0 Date: 12/12/2016
SWR 13 Exception	Depth (ft.): 5200.0

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION	
Date of test: 03/04/2018	Production method: Flowing
Number of hours tested: 24	Choke size: 28/64
Was swab used during this test? No	Oil produced prior to test: 6233.00
PRODUCTION DURING TEST PERIOD:	
Oil (BBLs): 680.00	Gas (MCF): 621
Gas - Oil Ratio: 913	Flowing Tubing Pressure: 1745.00
Water (BBLs): 2947	
CALCULATED 24-HOUR RATE	
Oil (BBLs): 680.0	Gas (MCF): 621
Oil Gravity - API - 60.: 43.1	Casing Pressure: 0.00
Water (BBLs): 2947	

CASING RECORD											
		Casing	Hole	Setting	Multi -	Multi -		Cement	Slurry	Top of	TOC
Row	Type of	Size	Size	Depth	Stage Tool	Stage Shoe	Cement	Amount	Volume	Cement	Determined
	Casing	(in.)	(in.)	(ft.)	Depth (ft.)	Depth (ft.)	Class	(sacks)	(cu. ft.)	(ft.)	By
1	Surface	9 5/8	12 1/4	5098	1163		ECONOCE M	692	921.0	0	Circulated to Surface
2	Surface	9 5/8	12 1/4	5098			ECONOCE M	3130	5293.0	1163	Circulated to Surface
3	Intermediate	7	8 3/4	12207			VERCACE M	1125	2777.0	2000	Calculation

LINER RECORD									
Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	4 1/2	6 1/8	11383	20273	VERSACEM	790	984.0	1140	Calculation

TUBING RECORD			
Row	Size (in.)	Depth (ft.)	Packer Depth (ft.)/Type
1	2 7/8	11390	/

PRODUCING/INJECTION/DISPOSAL INTERVAL			
Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 12290	20011.0

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.			
Was hydraulic fracturing treatment performed? Yes			
Is well equipped with a downhole actuation sleeve? Yes			
If yes, actuation pressure (PSIG): 9500.0			
Production casing test pressure (PSIG) prior to hydraulic fracturing treatment: 7500			
Actual maximum pressure (PSIG) during hydraulic fracturing: 9578			
Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)? Yes			
Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)

FORMATION RECORD

<u>Formations</u>	<u>Encountered</u>	<u>Depth TVD (ft.)</u>	<u>Depth MD (ft.)</u>	<u>Is formation isolated?</u>	<u>Remarks</u>
RUSTLER - POSSIBLE FLOW; POSSIBLE USABLE QUALITY W	Yes	791.0	791.0	Yes	
SALADO	Yes	1160.0	1160.0	Yes	
CASTILE	Yes	3083.0	3083.0	Yes	
LAMAR	Yes	5116.0	5116.0	Yes	
COLBY-QUEEN	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
YATES	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
QUEEN-SEVEN RIVERS	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
SAN ANDRES - HIGH FLOWS, H2S, CORROSIVE	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
HOLT	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
DELAWARE	Yes	5154.0	5154.0	Yes	
GLORIETA	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
CLEARFORK	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
WICHITA ALBANY	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
BRUSHY CANYON	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
CHERRY CANYON	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
CANYON	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
BONE SPRINGS	Yes	8743.0	8743.0	Yes	
MONTOYA	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
WADDELL	No			No	NOT ENCOUNTERED IN THE IMMEDIATE AREA
WOLFCAMP	Yes	11843.0	11780.0	Yes	
ATOKA	No			No	DEEPER THAN TD
STRAWN	No			No	DEEPER THAN TD
PENNSYLVANIAN	No			No	DEEPER THAN TD
MISSISSIPPIAN	No			No	DEEPER THAN TD
DEVONIAN	No			No	DEEPER THAN TD
SILURIAN	No			No	DEEPER THAN TD
FUSSELMAN	No			No	DEEPER THAN TD
ELLENBURGER	No			No	DEEPER THAN TD

Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm (SWR 36)?

No

Is the completion being downhole commingled (SWR 10)?

No

REMARKS

THIS IS AN IP FILING FOLLOW-UP TO WELL-RECORD ONLY W2 (TRACKING #187097).

RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2018-04-04 09:03:30.399] EDL=7721 feet, max acres=704, PHANTOM (WOLFCAMP) oil or gas well

CASING RECORD :

TUBING RECORD:

PRODUCING/INJECTION/DISPOSAL INTERVAL :

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :

POTENTIAL TEST DATA:

OPERATOR'S CERTIFICATION

Printed Name: Tessa Fitzhugh

Title: Regulatory Analyst

Telephone No.: (432) 620-4336

Date Certified: 03/13/2018



RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

Form W-15

Rev. 08/2014

CEMENTING REPORT

Cementer: Fill in shaded areas.
Operator: Fill in other items.

OPERATOR INFORMATION

Operator Name: XTO ENERGY	Operator P-5 No.: 945936
Cementer Name: HALLIBURTON ENERGY SERVICES	Cementer P-5 No.: 347151

WELL INFORMATION

District No.: 8	County: WINKLER	
Well No.: 1307H	API No.: 496-33710	Drilling Permit No.:
Lease Name: UNIVERSITY BLK 20	Lease No.: 42354	
Field Name: two george (bone spring)	Field No.: 71052900	

I. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.):	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

II. CASING CEMENTING DATA

Type of casing: <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input checked="" type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.): 12 1/4	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement: 20%
Size of casing in O.D. (in.): 9 5/8	Casing weight (lbs/ft) and grade: 40# J55	No. of centralizers used: 29
Tapered string drilled hole size (in.)	Tapered string depth of drilled hole (ft.)	
Upper: Lower:	Upper: Lower:	
Tapered string size of casing in O.D. (in.)	Tapered string casing weight (lbs/ft) and grade	Tapered string no. of centralizers used
Upper: Lower:	Upper: Lower:	Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Setting depth shoe (ft.): 5098	
Hrs. waiting on cement before drill-out: 18.5	Calculated top of cement (ft.): 1163	Cementing date: 5/24/17

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	2645	ECONOCM-C	SEE REMARKS	5149.81	16442.56
2	485	HALCEM-C	NONE	646.02	2062.64
3					
Total	3130			5795.83	18505.2

III. CASING CEMENTING DATA

Type of casing: <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input checked="" type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.): 12 1/4	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement: 20%
Size of casing in O.D. (in.): 9 5/8	Casing weight (lbs/ft) and grade: 40# J55	No. of centralizers used: 29
Tapered string drilled hole size (in.)	Tapered string depth of drilled hole (ft.)	
Upper: Lower:	Upper: Lower:	
Tapered string size of casing in O.D. (in.)	Tapered string casing weight (lbs/ft) and grade	Tapered string no. of centralizers used
Upper: Lower:	Upper: Lower:	Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth tool (ft.): 1163	
Hrs. waiting on cement before drill-out: 18.5	Calculated top of cement (ft.): 8	Cementing date: 5/25/17

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	545	HALCEM-C	NONE	725.94	2317.86
2	147	TOP OUT PREM PLUS-C	NONE	195.80	625.17
3					
Total	692			921.74	2943.03

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

REMARKS

1ST STG LEAD HAS 3 LBM KOL-SEAL, .1250 LBM POLY-E-FLAKE, .65% HR-800, 5% SALT
CIRCULATED 15 BBLS 63 SKS OF TOP OUT CEMENT TO SURFACE

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

MARIO RODRIGUEZ SERVICE SUPERVISOR III

Halliburton

Name and title of cementer's representative

Cementing Company

Signature

6155 W. Murphy St.

Odessa, TX, 79763

432-571-8600

5/25/17

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Tessa Fitzhugh
Typed or printed name of operator's representative

Title

Signature

500 W. Illinois, Ste 100 Midland TX 79701
Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readatc\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&ri=14](http://info.sos.state.tx.us/pls/pub/readatc$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&ri=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.



RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

REC'D MIDLAND

JUL 05 2017

Form W-15

Rev. 08/2014

Cementer: Fill in shaded areas.
Operator: Fill in other items.

CEMENTING REPORT

OPERATOR INFORMATION	
Operator Name: XTO ENERGY	Operator P-5 No.:
Cementer Name: HALLIBURTON ENERGY SERVICES	Cementer P-5 No.: 347151

WELL INFORMATION		
District No.:	County: WINKLER	
Well No.: 1307H	API No.:	Drilling Permit No.:
Lease Name: UNIVERSITY BLK 20	Lease No.:	
Field Name:	Field No.:	

I. CASING CEMENTING DATA		
Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.): 3 3/4	Depth of drilled hole (ft.): 12,207	Est. % wash-out or hole enlargement: 20%
Size of casing in O.D. (in.): 7	Casing weight (lbs/ft) and grade: 29#, P-110	No. of centralizers used: 60
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.): 12,207	Top of liner (ft.):
Hrs. waiting on cement before drill-out: 47	Calculated top of cement (ft.): 2000	Cementing date: 6/15/17

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	885	ECONOCCEM	SEE REMARKS	2478	16487.02
2	240	VERSACEM	SEE REMARKS	299.28	1991.21
3					
Total	1125			2777.28	18478.23

II. CASING CEMENTING DATA			
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings			
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:	
Tapered string drilled hole size (in.)	Tapered string depth of drilled hole (ft.)		
Upper:	Lower:	Upper:	Lower:
Tapered string size of casing in O.D. (in.)	Tapered string casing weight (lbs/ft) and grade	Tapered string no. of centralizers used	
Upper:	Lower:	Upper:	Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth shoe (ft.):		
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:	

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

III. CASING CEMENTING DATA			
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings			
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:	
Tapered string drilled hole size (in.)	Tapered string depth of drilled hole (ft.)		
Upper:	Lower:	Upper:	Lower:
Tapered string size of casing in O.D. (in.)	Tapered string casing weight (lbs/ft) and grade	Tapered string no. of centralizers used	
Upper:	Lower:	Upper:	Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth tool (ft.):		
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:	

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2			NONE		
3					
Total	0			0	0

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

REMARKS
LEAD SLURRY HAS .05% SA-1015, .75% HR-800, .25 LBM D-AIR 5000, TAIL SLURRY HAS .50% LAP-1, .30% CFR-3, .25 LBM D-AIR 5000 .15% HR-601

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MARIO RODRIGUEZ SERVICE SUPERVISOR III

Halliburton

Name and title of cementer's representative

Cementing Company

Signature

6155 W. Murphy St.

Odessa, TX, 79763

432-571-8600

6/15/17

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Tessa Fitzhugh

Reg. Analyst

Jenna Fitzhugh

Typed or printed name of operator's representative

Title

Signature

500 W. Illinois, 50100 Midland TX 79701

432-620-4330

2.7.2018

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

Instructions for Form W-15, Cementing Report

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- Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the subsequent Casing Cementing Data box.



RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

Form W-15

Rev. 08/2014

CEMENTING REPORT

Cementer: Fill in shaded areas.
Operator: Fill in other items.

OPERATOR INFORMATION

Operator Name: XTO ENERGY INC-E BUS

Operator P-5 No.: 445436

Cementer Name: HALLIBURTON ENERGY SERVICES

Cementer P-5 No.: 347151

WELL INFORMATION

District No.: 08

County: WINKLER

Well No.: 1307H

API No.: 495-33710

Drilling Permit No.:

Lease Name: UNIVERSITY BLK 20

Lease No.: 42354

Field Name: two george (bone spring)

Field No.: 71052900

I. CASING CEMENTING DATA

Type of casing: ☐ Conductor ☐ Surface ☐ Intermediate ☒ Liner ☐ Production

Drilled hole size (in.): 6 1/8

Depth of drilled hole (ft.): 20,273

Est. % wash-out or hole enlargement:

Size of casing in O.D. (in.): 4 1/2

Casing weight (lbs/ft) and grade: 13.5-110

No. of centralizers used:

Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO If no for surface casing, explain in Remarks.

Setting depth shoe (ft.):

Top of liner (ft.): 11383

20,273

Setting depth liner (ft.): 20,273

Hrs. waiting on cement before drill-out:

Calculated top of cement (ft.): 11409

Cementing date: 7/7/2017

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	790	VERSACEM	REMARKS	984	8887
2					
3					
Total	790			984	8887

II. CASING CEMENTING DATA

Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement shoe ☐ Multiple parallel strings

Drilled hole size (in.):

Depth of drilled hole (ft.):

Est. % wash-out or hole enlargement:

Size of casing in O.D. (in.):

Casing weight (lbs/ft) and grade:

No. of centralizers used:

Tapered string drilled hole size (in.)

Tapered string depth of drilled hole (ft.)

Upper: Lower:

Upper: Lower:

Tapered string size of casing in O.D. (in.)

Tapered string casing weight (lbs/ft) and grade

Tapered string no. of centralizers used

Upper: Lower:

Upper: Lower:

Upper: Lower:

Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO

Setting depth shoe (ft.):

Hrs. waiting on cement before drill-out:

Calculated top of cement (ft.):

Cementing date:

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

III. CASING CEMENTING DATA

Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement/DV tool ☐ Multiple parallel strings

Drilled hole size (in.):

Depth of drilled hole (ft.):

Est. % wash-out or hole enlargement:

Size of casing in O.D. (in.):

Casing weight (lbs/ft) and grade:

No. of centralizers used:

Tapered string drilled hole size (in.)

Tapered string depth of drilled hole (ft.)

Upper: Lower:

Upper: Lower:

Tapered string size of casing in O.D. (in.)

Tapered string casing weight (lbs/ft) and grade

Tapered string no. of centralizers used

Upper: Lower:

Upper: Lower:

Upper: Lower:

Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO

Setting depth tool (ft.):

Hrs. waiting on cement before drill-out:

Calculated top of cement (ft.):

Cementing date:

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

REMARKS

SO# 904033472 Additives= .4% Halad(3440, .3% D-Air 5000,.3% HR 601

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

DANNY DEEL

Halliburton

Name and title of cementer's representative

Cementing Company

Signature

1301 W. Webb St.

Brownfield, Tx, 79316

575-392-0700

7/6/2017

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Tessa Fitzhugh
Typed or printed name of operator's representative

Title

Signature

500 W. Illinois St 6100 Midland TX 79701
Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.

Tracking No.: 188631

This facsimile L-1 was generated electronically from data submitted to the RRC.

Instructions

When to File Form L-1:

- with Forms G-1, W-2, and GT-1 for new and deepened gas, oil, and geothermal wells
- with Form W-3 for plugged dry holes
- when sending in a log which was held under a request for confidentiality and the period for confidentiality has not yet expired.

When is Form L-1 NOT required:

- with Forms W-2, G-1, and GT-1 filed for injection wells, disposal wells, water supply wells, service wells, re-test wells, re-classifications, and plugbacks of oil, gas or geothermal wells
- with Form W-3 for plugging of other than a dry hole

Where to File Form L-1:

- with the appropriate Commission district office

Filling out Form L-1:

- Section I and the signature section must be filled out for all wells
- complete only the appropriate part of Section II

Type of log required:

- any wireline survey run for the purpose of obtaining lithology, porosity, or resistivity information
- no more than one such log is required but it must be of the subject well
- if such log is NOT run on the subject well, do NOT substitute any other type of log; just select Section II, Part A below

SECTION I. IDENTIFICATION

Operator Name: XTO ENERGY INC.	District No. 08	Completion Date: 02/10/2018
Field Name TWO GEORGES (BONE SPRING)	Drilling Permit No. 813658	
Lease Name UNIVERSITY BLK 20	Lease/ID No. 42354	Well No. 1307H
County WINKLER	API No. 42- 495-33710	

SECTION II. LOG STATUS (Complete either A or B)

☐ A. BASIC ELECTRIC LOG NOT RUN☒ B. BASIC ELECTRIC LOG RUN. (Select one)

- ☒ 1. Confidentiality is requested and a copy of the header for each log that has been run on the well is attached.
- ☐ 2. Confidentiality already granted on basic electric log covering this interval (applicable to deepened wells only).
- ☐ 3. Basic electric log covering this interval already on file with Commission (applicable to deepened wells only).
- ☐ 4. Log attached to (select one):

☐ (a) Form L-1 (this form). If the company/lease name on log is different from that shown in Section I, please enter name on log here: _____

Check here if attached log is being submitted after being held confidential. ☐

☐ (b) Form P-7, Application for Discovery Allowable and New Field Designation.

☐ (c) Form W-4, Application for Multiple Completion:

Lease or ID No(s). _____

Well No(s). _____

Tessa Fitzhugh

Signature

XTO ENERGY INC.

Name (print)

Regulatory Analyst

Title

(432) 620-4336

Phone

03/08/2018

Date

-FOR RAILROAD COMMISSION USE ONLY-



Radial Cement Bond Variable Density Log W / Gamma Ray / CCL

Company XTO Energy
Well University Block 20 #1307H
Field Wolfcamp
County Winkler
State Texas

Company XTO Energy

Well University Block 20 #1307H

Field Wolfcamp

County Winkler

State Texas

Location: API #: 42-495-33710

1963' FNL & 1536' FWL
Sec. 13, Blk. 20, Abs. U14,UL

Other Services

JB/GR

Elevation

Permanent Datum

Ground Level

Elevation 2813'

Log Measured From

Kelly Bushing

K.B. 2840'

Drilling Measured From

Kelly Bushing

27' APD

D.F. 2839'

G.L. 2813'

Date	2-August-2017		
Run Number	One		
Depth Driller	20273'		
Depth Logger	11480'		
Bottom Logged Interval	11478'		
Top Log Interval	Surface		
Open Hole Size	6.125"		
Type Fluid	Water		
Density / Viscosity	-		
Max. Recorded Temp.	-		
Estimated Cement Top	-		
Time Well Ready	9:00		
Time Logger on Bottom	11:30		
Equipment Number	101		
Location	Odessa, Tx		
Recorded By	James Rudolph		
Witnessed By	Rob Lane		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
One	24"	Surface	85'				
Two	12.25"	85'	5098'				
Three	8.75"	5098'	12207'				
Four	6.125"	12207'	20273'				
Casing Record		Size	Wgt/Ft	Top		Bottom	
Surface String		20"	94#	Surface		86.5'	
Prod. String		9.625"	40#	Surface		5098'	
Production String		7"	29#	Surface		12207'	
Liner		4.5"	13.5#	11409'		20273'	
Short Joint							

<<< Fold Here >>>

RAILROAD COMMISSION OF TEXAS

**1701 N. Congress
P.O.Box 12967
Austin, Texas 78701-2967**

P-16 Data Sheet

Page 1

Rev. 01/2016

Acreage Designation

SECTION I. OPERATOR INFORMATION			
Operator Name:	XTO Energy, Inc.	Operator P-5 No.:	945936
Operator Address:	500 W. Illinois St, Ste 100, Midland, Texas 79701		

SECTION II: WELL INFORMATION		
District No.: 8	County: Winkler	Purpose of Filing: <input type="checkbox"/> Drilling Permit Application (Form W-1) <input checked="" type="checkbox"/> Completion Report
Well No.: 1307H	API No.: 495-33710	
Total Lease Acres: 1381.5	Drilling Permit No.: 813658	
Lease Name: University Blk 20	Lease No.: 42354	
Field Name: Two Georges (Bone Spring)	Field No.: 92100050	

Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

SECTION III. LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER							
RRC ID No. or Lease No.	Well No.	H -Horizontal D-Directional V-Vertical	Lease Name	API No.	Acres Assigned	SWR 38 Except. (Y/N)	Operator Name and Operator No. (if different from filing operator)
42354	1H	H	University Blk 20	495-33366	172.69	N	
	1302H	H	University Blk 20	495-33471	172.69	N	
	1303H	H	University Blk 20	495-33462	172.69	N	
	1304H	H	University Blk 20	495-33463	172.69	N	
	1306H	H	University Blk 20	495-33671	172.69	N	
DP 813658	1307H	H	University Blk 20	495-33710	172.69	N	
	1305H	H	University Blk 20	495-33580	172.68	N	
DP 813662	1311H	H	University Blk 20	495-33714	172.68	N	
Total Well Count>	8	1381.5	< A. Total Assigned Horiz. Acreage		1381.5	< C. Total Assigned Acreage	
			< Total Remaining Horiz. Acreage			< Total Remaining Acreage	
			< B. Total Assigned Vert./Dir. Acreage				
			< Total Remaining Vert./Dir. Acreage				

SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)	

Attach Additional Pages As Needed. ☒ No additional pages ☐ Additional Pages: _____ (No. of additional pages)

CERTIFICATION: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that this report was prepared by me or under my supervision or direction, that I am authorized to make this report, and that the information contained in this report is true, correct, and complete to the best of my knowledge.

Signature

Tessa Fitzhugh
Name and title (type or print)

tessa_fitzhugh@xtoenergy.com

Email (include email address *only* if you affirmatively consent to its public release)

500 W. Illinois, Ste 100, Midland, TX 79701

432-620-4336

Address

City. State.

Zip Code

Tel: Area Code

Number

Date: mo. day yr.

12.14.2017

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued: 12 December 2016**GAU Number:** 164240**Attention:** XTO ENERGY INC.
ATTN ALAN CODY
FORT WORTH, TX 76102**API Number:** 49533710
County: WINKLER
Lease Name: UNIVERSITY BLK 20**Operator No.:** 945936**Lease Number:**
Well Number: 1307H
Total Vertical Depth: 12500
Latitude: 31.726233
Longitude: -103.285400
Datum: NAD27**Purpose:** New Drill**Location:** Survey-UL; Abstract-U14; Block-20; Section-13

To protect usable-quality groundwater at this location, the Groundwater Advisory Unit of the Railroad Commission of Texas recommends:

The interval from the land surface to the base of the Allurosa, which is estimated to occur at a depth of 950 feet, must be protected.

Please send Gamma Ray/Porosity log of this well when it is available.

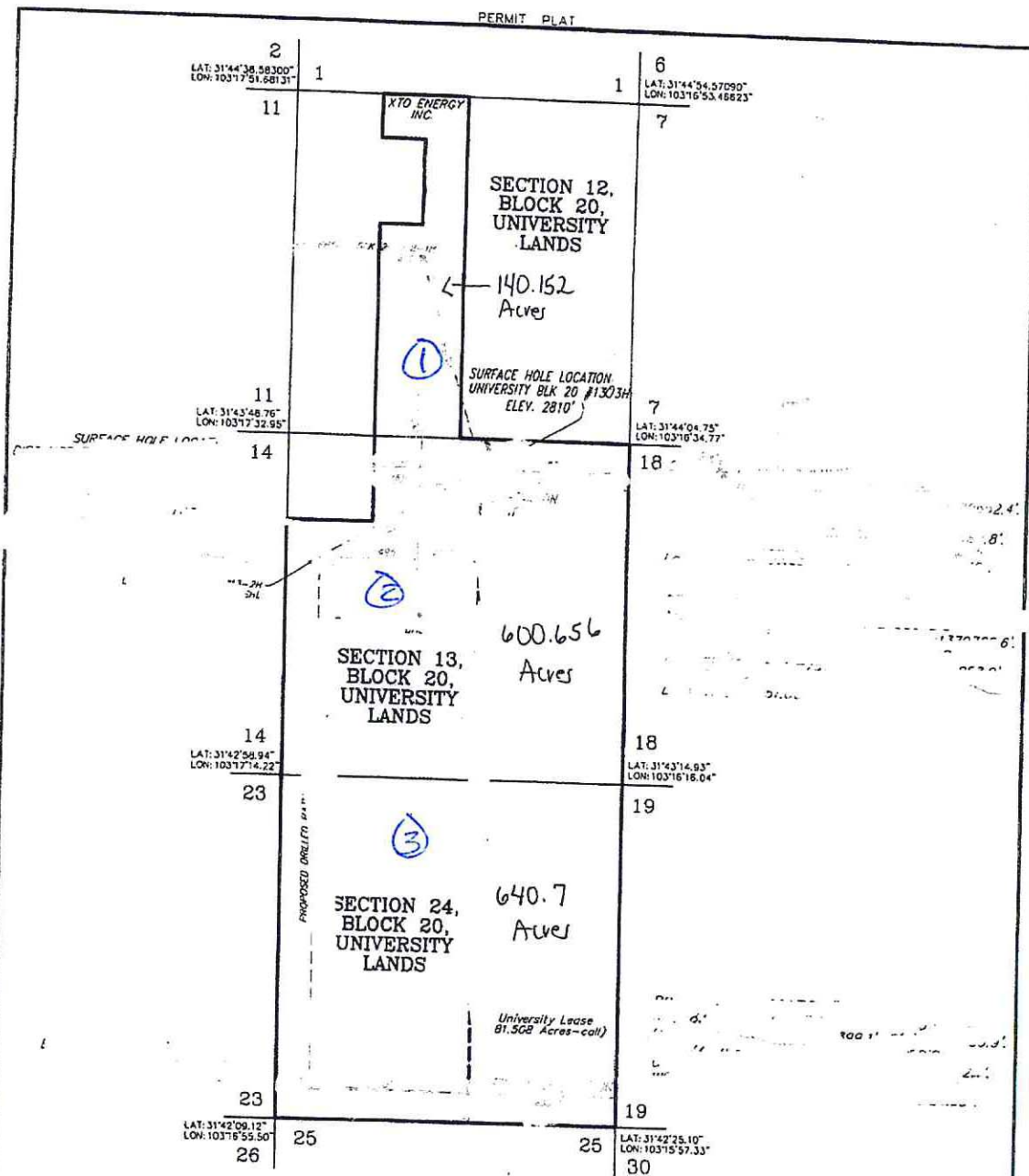
This recommendation is applicable for all wells drilled in this Section 13 on this Lease.

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).

This determination is based on information provided when the application was submitted on 12/08/2016. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

Groundwater Advisory Unit, Oil and Gas Division

PERMIT PLAT



NOTE: THIS PERMIT PLAT HAS BEEN PREPARED FROM A CERTIFIED SURVEY PLAT ON FILE IN THE OFFICE OF JOHN F. WATSON & COMPANY, MIDLAND, TEXAS. APPROXIMATELY 7.4 MILES SOUTHWEST OF WINK, TEXAS

I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PLAT WAS DERIVED FROM ACTUAL FIELD NOTES OF ON-THE-GROUND SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THE INFORMATION PRESENTED HEREON IS FOR THE PRIVATE USE OF THE PARTY NAMED IN THE "REFERENCE PORTION" OF THE TITLE BLOCK AND DOES NOT CONSTITUTE A COMPLETE BOUNDARY SURVEY AS DEFINED BY THE "PROFESSIONAL LAND SURVEYING PRACTICES ACT."

REGISTERED PROFESSIONAL LAND SURVEYOR

10-05-2012
DATE

PERMIT PLAT

SCALE: 1" = 2000'

John F. Watson & Company

LAND & DEVELOPMENT SERVICES
PROFESSIONAL LAND SURVEYORS

200 N. Loraine, Ste. 230
Midland, Texas 79701
jwatson@windearthwater.com

off: (432) 520-2400
fax: (432) 520-2404
mob: (432) 528-0174



XTO ENERGY, INC.
UNIVERSITY BLK 20 #1303H
SHL: 467' FNL & 2302' FEL - SECTION 13
PP/TTL: 717' FNL & 2302' FEL - SECTION 13
BHL/BTL: 467' FSL & 2302' FEL - SECTION 24
BLOCK 20, UNIVERSITY LANDS, WINKLER COUNTY, TEXAS

JOB NO.: 12-0188 FIELD BOOK 115/25 DRAFT KP DATE 10/5/12